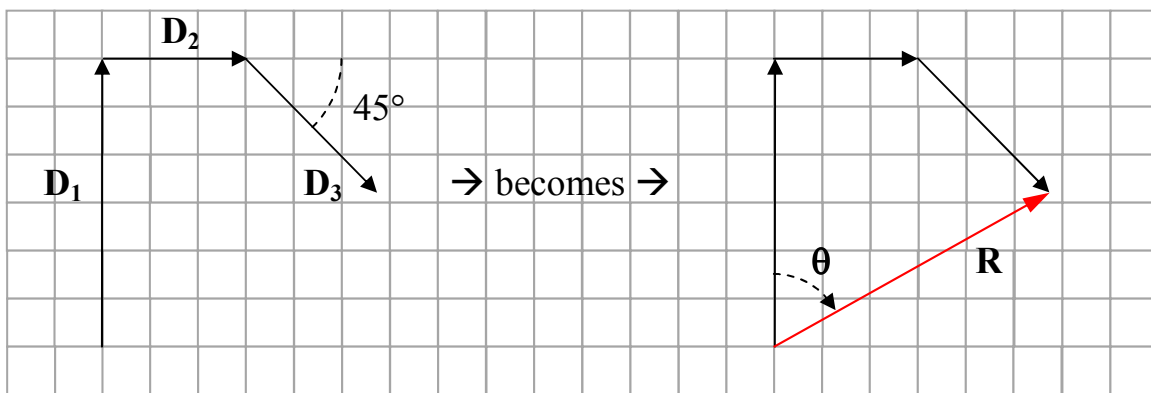


**Example 2.**

**Add the displacements  $D_1 + D_2 + D_3 = R$  where  $D_1 = 6$  km north,  $D_2 = 3$  km east, and  $D_3 = 4$  km ( $45^\circ$  S of E).**

Assume north is 'up'. Use the scale 1 grid length = 1 km and:

- draw the vector-sum tip-to-tail:
- draw the resultant **R**
- measure the length **R** and convert to kilometers
- measure the angle using a protractor
- report R.



- **R** should measure to be 6.7 km;  $\theta = 63^\circ$

**→R = 6.7 km at  $63^\circ$  E of N (or  $27^\circ$  N of E)**